THE EFFECTIVE DATE OF THIS ORDINANCE IS SEPTEMBER 14, 2007

ORDINANCE NO. 07-29-469

Zoning Text Amendment - ZT-07-11

RE: To amend the Floodplain District of the Frederick County Zoning Ordinance

PREAMBLE

Staff has performed a review of existing Frederick County Zoning Ordinance floodplain management regulations in conjunction with the completion of the Federal Emergency Management Agency (FEMA) project of updating Frederick County Flood Insurance Rate Maps. Several areas have been identified where updates and changes to existing regulations would provide a clearer more concise set of regulations for implementation by Staff and Board of Appeals, and understanding by the general public. At a minimum, the County must provide evidence of adoption of floodplain management regulations that meet National Flood Insurance Program (NFIP) standards prior to September 19, 2007.

The Federal Emergency Management Agency (FEMA) project to update Frederick County Flood Insurance Rate Maps (FIRM) has been completed, with an effective date of September 19, 2007. As stated in a letter from Mr. William Blanton Jr., received on March 20, 2007, "prior to September 19, 2007, your community is required, as a condition of continued eligibility in the NFIP, to adopt or show evidence of adoption of floodplain management regulations that meet the

standards of Paragraph 60.3(d) of the NFIP regulations (44 CFR 59, etc.) by the effective date of the Flood Insurance Rate Map (FIRM)".

Staff met with the Board of County Commissioners (BOCC) on May 15, 2007 to request direction regarding updates to the existing Floodplain District Regulations to meet the above requirement. Staff reviewed and updated existing text, made changes based on recommendations by the State NFIP Coordinating Office, and then presented the recommended draft text amendment to the Board at a worksession on July 17, 2007. At the worksession, the Board directed Staff to move forward to the public hearing process with the recommended changes.

The majority of Staff edits are limited to reorganization and removal of duplicate or outdated language. Changes were also made to meet requirements and recommendations as outlined in the letter from John Joyce of the State NFIP Coordinating Office (dated January 26, 2006). Edits to more closely reflect the State Model Floodplain Ordinance were added where it improves clarity and application of the regulation. In addition, existing Section 1-19-327A *Additional Requirements in the Linganore Watershed Protection Area* has been renumbered to Section 1-19-333.

The Frederick County Planning Commission held a public hearing on August 15, 2007. The Planning Commission voted to recommend approval of the text amendment.

A public hearing was held by the Board of County Commissioners on this Ordinance on September 4, 2007. The zoning text amendment and the public hearing before the Board of County Commissioners were duly advertised. The public had an opportunity to comment on this Ordinance at these public hearings.

NOW, THEREFORE, BE IT ENACTED AND ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF FREDERICK COUNTY, MARYLAND, that Sections 1-19-4, 1-19-30, 1-19-326, 1-19-327, 1-19-328, 1-19-329, 1-19-330, 1-19-331. 1-19-332, 1-19-333, 1-19-359, 1-19-436 of the Frederick County Code (2004) be amended as shown on the attached Exhibit A, which is incorporated herein by reference.

AND BE IT FURTHER ENACTED AND ORDAINED that this Ordinance shall take effect on September 14, 2007.

The undersigned hereby certifies that this Ordinance was approved and adopted on the 4th day of September, 2007.

ATTEST:

Douglas D. Browning
County Manager

BOARD OF COUNTY COMMISSIONERS
OF FREDERICK COUNTY, MARYLAND

Jan H. Gardner
President

MJC 9/5/07

EXHIBIT A

ARTICLE I: IN GENERAL

§1-19-4. DEFINITIONS

~~*ANNUAL FLOODPLAIN.* Those soil types defined as *ANNUAL FLOODPLAIN* in the "Natural Physical Characteristics" report published by the County Planning Commission or the soil types designated by the U.S. Soil Conversation Service Natural Resources Conservation Service in the Soil Survey of Frederick County, Maryland as areas of general wet land which provides natural water retention.~~

APPROXIMATE FLOODPLAIN. **THOSE PORTIONS OF LAND SUBJECT TO INUNDATION BY THE 100-YEAR FLOOD, WHERE NO WATER SURFACE ELEVATIONS OR FLOODWAY DATA HAVE BEEN PROVIDED. A 100-YEAR FLOOD ELEVATION SHALL BE ESTABLISHED AFTER CONSIDERATION OF ANY FLOOD ELEVATION AND FLOODWAY DATA AVAILABLE FROM FEDERAL, STATE, OR OTHER SOURCES. THE APPROXIMATE FLOODPLAIN APPEARS ON BOTH THE FLOOD INSURANCE RATE MAPS AND FLOOD BOUNDARY AND FLOODWAY MAPS AND MAY APPEAR ON ALL PANELS AS ZONE A.**

BASE FLOOD. The 100-year frequency flood event **(HAVING ONE CHANCE IN A HUNDRED OF BEING EQUALED OR EXCEEDED IN ANY YEAR)** as indicated in the Flood Insurance Study, as amended, the elevation of which is used for regulatory purposes in this Chapter.

FEMA FLOODPLAIN. **THE COMBINED AREA OF THE 100-YEAR FREQUENCY FLOOD (INCLUDING THE FLOODWAY AND FLOODWAY FRINGE), AND APPROXIMATE FLOODPLAIN.**

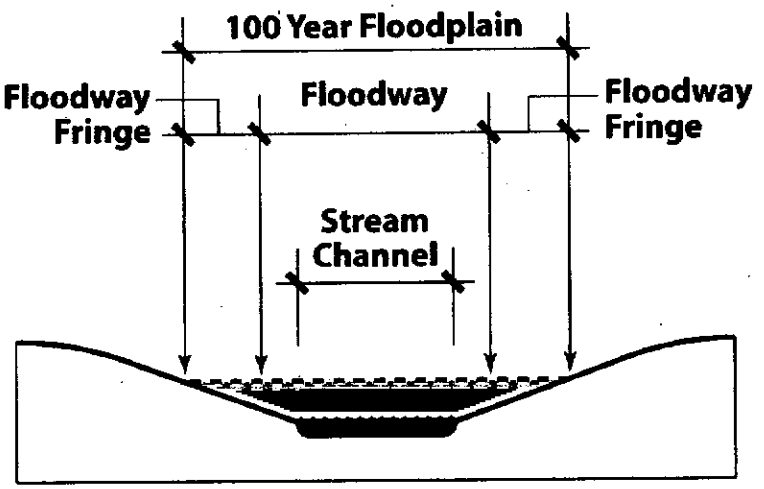
FLOODING SOILS. **THOSE SOILS WITH THE CHARACTERISTIC OF FLOODING (THE TEMPORARY INUNDATION OF AN AREA CAUSED BY OVERFLOWING STREAMS, BY RUNOFF FROM ADJACENT SLOPES, OR BY TIDES) AS IDENTIFIED IN THE SOIL SURVEY OF FREDERICK COUNTY, MARYLAND AND THE WEB SOIL SURVEY, WATER FEATURES TABLE, AS AMENDED.**

FLOODPROOFING CERTIFICATE. Form supplied by FEMA to certify that a building has been designed and constructed to be structurally dry floodproofed to the **Fflood Pprotection Eelevation (FPE).**

FLOODWAY. The channel **OF A WATERCOURSE** and adjacent land area, required to discharge the waters of the 100-year flood ~~of a watercourse~~ without increasing the water surface elevations **ABOVE EXISTING 100-YEAR FLOOD CONDITIONS** more than a specified height.

CAPITALS INDICATE ENTIRELY NEW MATTER ADDED TO THE CODE.
~~Strikethroughs~~ indicate matter deleted from existing Ordinance.

FLOODWAY FRINGE. THOSE PORTIONS OF LAND SUBJECT TO INUNDATION BY THE 100-YEAR FLOOD, LYING BEYOND THE FLOODWAY (WHERE A FLOODWAY HAS BEEN DETERMINED) OR IN AREAS WHERE DETAILED STUDY DATA, PROFILES, AND 100-YEAR FLOOD ELEVATIONS HAVE BEEN ESTABLISHED. THE FLOODWAY FRINGE APPEARS ON THE FLOOD BOUNDARY AND FLOODWAY MAP AND FLOOD INSURANCE RATE MAPS.



~~*HISTORICAL FLOODPLAIN*. That historical floodplain being defined within the "Natural Physical Characteristics" report published by the County Planning Commission for the Potomac River, Monocacy River or Catoctin Creek, as an area which at some point in time has or could be inundated by water due to flood conditions.~~

LOWEST FLOOR. The lowest floor of the lowest enclosed area, ~~(~~including basement~~)~~. An unfinished enclosure, constructed of flood-resistant materials used solely for parking of vehicles, STORAGE, or building access in an area other than a basement ~~area~~ is not ~~considered a building's~~ **the** lowest floor, as long as it is supplied with water equalizing vents.

NEW CONSTRUCTION. WITHIN THE FLOODPLAIN DISTRICT, A STRUCTURE FOR WHICH THE START OF CONSTRUCTION COMMENCED ON OR AFTER JUNE 1ST 1978, AND INCLUDES ANY SUBSEQUENT IMPROVEMENTS.

ONE HUNDRED (100) YEAR FREQUENCY FLOOD. The **B**~~b~~ase **F**~~f~~lood, having 1 chance in a 100 (1% chance) of being equaled or exceeded in any year.

SUBSTANTIAL DAMAGE. Damage BY ANY MEANS ~~of any origin~~ sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50% of the market value of the structure before damage occurred.

CAPITALS INDICATE ENTIRELY NEW MATTER ADDED TO THE CODE.
~~Strikethroughs~~ indicate matter deleted from existing Ordinance.

SUBSTANTIAL IMPROVEMENT. Any repair, reconstruction, **ALTERATION,** or improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure **(LESS LAND VALUE)** either:

(a) Before the improvement or repair is started; or

(b) if the structure **INCURRED SUBSTANTIAL DAMAGE AND** has been ~~damaged and is being~~ restored, before the damage occurred. *SUBSTANTIAL IMPROVEMENT* occurs when the first alteration of any wall, ceiling, floor or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. **SUBSTANTIAL IMPROVEMENTS WILL BE CALCULATED ON A CUMULATIVE BASIS.** The minimum repairs needed to correct previously identified violations of local health, safety or sanitary codes and alterations to historic structures which do not preclude their continued designation as historic structures are not considered substantial improvements. **THE TERM ALSO INCLUDES STRUCTURES WHICH HAVE INCURRED SUBSTANTIAL DAMAGE REGARDLESS OF THE ACTUAL REPAIR WORK PERFORMED.**

WATERCOURSE. **NATURAL OR ONCE NATURALLY FLOWING (PERENNIALLY OR INTERMITTENTLY) WATER INCLUDING RIVERS, STREAMS, AND CREEKS. INCLUDES NATURAL WATERWAYS THAT HAVE, ARE, OR HAVE BEEN CHANNELIZED, BUT DOES NOT INCLUDE MAN-MADE CHANNELS, DITCHES, AND UNDERGROUND DRAINAGE AND SEWAGE SYSTEMS.**

WETLAND. **ANY LAND WHICH IS: (1) CONSIDERED PRIVATE WETLAND OR STATE WETLAND PURSUANT TO TITLE 9, WETLAND AND RIPARIAN RIGHTS, NATURAL RESOURCES ARTICLE, ANNOTATED CODE OF MARYLAND; OR (2) DEFINED AS WETLAND UNDER THE PROCEDURES DESCRIBED IN THE "FEDERAL MANUAL FOR IDENTIFYING AND DELINEATING JURISDICTIONAL WETLANDS" BY THE FEDERAL INTERAGENCY COMMITTEE FOR WETLAND DELINEATION, 1989, AS AMENDED.**

~~***WETLAND.*** **Any land which is:~~

~~(a) Considered private wetland or state wetland pursuant to Md. Code Ann., Natural Resources Article, Title 9, wetland and riparian rights; or~~

~~(b) Defined as wetland under the procedures described in the "Federal Manual for Identifying and Delineating Jurisdictional Wetlands" by the Federal Interagency Committee for Wetland Delineation, 1987, as amended.~~

WATERBODY. Intermittent and perennial streams, lakes and ponds, excluding stormwater management ponds in the Linganore Watershed Protection Area. See Section 1-19-~~327A~~**333**.

CAPITALS INDICATE ENTIRELY NEW MATTER ADDED TO THE CODE.
~~Strikethroughs~~ indicate matter deleted from existing Ordinance.

ARTICLE II: ADMINISTRATION AND ENFORCEMENT

DIVISION 1 GENERALLY

§1-19-30. COMPLAINTS

(D) Violations of the FEMA floodplain regulations set forth in ~~§ 1-19-324~~ **§1-19-326 through 1-19-329** shall also be subject to the following~~.~~**:**

(1) The Federal Emergency Management Agency and the Maryland ~~Water Resources Administration~~ **DEPARTMENT OF THE ENVIRONMENT** shall be notified immediately in writing of any property or structure in violation of the floodplain section of this chapter.

(2) New or renewal National Flood Insurance shall be denied for any structure remaining in violation or situated on property in violation of this chapter.

ARTICLE V. DISTRICT REGULATIONS

DIVISION 5. FLOODPLAIN DISTRICT REGULATIONS

§ 1-19-326. FLOODPLAIN DISTRICT.

(A) PURPOSE AND INTENT.

THE FLOODPLAIN DISTRICT IS ESTABLISHED TO PROTECT HUMAN LIFE AND HEALTH, MINIMIZE PROPERTY DAMAGE, ENCOURAGE APPROPRIATE CONSTRUCTION PRACTICES TO MINIMIZE FUTURE DAMAGE, TO PROTECT WATER SUPPLY, SANITARY SEWAGE DISPOSAL, AND NATURAL DRAINAGE. For purposes of this chapter, and other applicable ordinances, the Floodplain District will be considered to be the most extensive of the following:

(1) FEMA Floodplain;
(2) **FLOODING SOILS**; and
(3) Wetland areas.

(B) Establishing the Floodplain District.

The Floodplain District is an overlay to the underlying zoning districts as shown on the zoning map. The provisions of the Floodplain District are supplementary to the regulations of the underlying zoning district. Where there is any conflict between the provisions or requirements of the Floodplain District and those of any underlying district, the more restrictive provisions pertaining to the Floodplain District will apply.

(1) The Zoning Administrator shall establish a Floodplain District and an official map. THE FLOODPLAIN DISTRICT WILL BE CONSIDERED TO BE THE MOST EXTENSIVE OF THE FOLLOWING: FEMA FLOODPLAIN, FLOODING SOILS, AND WETLANDS. THE ZONING ADMINISTRATOR MAY ALSO UTILIZE AVAILABLE HISTORIC DATA IN DETERMINING THE LIMITS OF THE FLOODPLAIN DISTRICT, INCLUDING WITHOUT LIMITATION PHOTOGRAPHS AND HIGH WATER ELEVATIONS.

(2) Within the FEMA floodplain, the source of this delineation shall be at a minimum the MOST RECENT EFFECTIVE FLOOD INSURANCE STUDY AND DIGITAL FLOOD INSURANCE RATE MAP (D-FIRM) FOR FREDERICK COUNTY, PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, AS AMENDED.

(3) The FEMA floodplain is established with emphasis on the 100-year flood elevation where defined rather than the area graphically delineated on the official floodplain maps. Where map boundaries and elevations disagree, elevations prevail, with no approval from FEMA required.

(4) The delineation of the FEMA floodplain may be revised, amended and modified by the Zoning Administrator in compliance with the National Flood Insurance Program (NFIP) and the Maryland Department of the Environment, when:

(a) There are changes through natural or other causes to flood elevations and boundaries; or

(b) Changes are indicated by detailed hydrologic and hydraulic information and studies.

(c) As soon as practicable, but not later than 6 months after the date such information becomes available, the Zoning Administrator shall notify the Federal Insurance Administrator of the changes by submitting technical and scientific data in accordance with 44 CFR part 65. All such changes shall be subject to the review and prior approval of the Federal Emergency Management Agency and the Maryland Department of the Environment.

(5) The location and limits of FLOODING SOILS ARE DETERMINED BY THE SOIL SURVEY OF FREDERICK COUNTY AND WEB SOIL SURVEY, AS AMENDED.

(6) The location and limits of wetlands ARE DETERMINED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT WETLAND AND WATERWAYS PROGRAM.

(7) Any dispute of the FEMA floodplain, shall be appealed to Federal Emergency Management Agency through the Zoning Administrator, while disputes regarding FLOODING SOILS, SHALL BE APPEALED TO THE NATURAL RESOURCES CONSERVATION SERVICE, THROUGH THE ZONING ADMINISTRATOR. DISPUTES

REGARDING wetlands shall be appealed to the Maryland Department of the Environment. (Ord. 92-04-039, 2-13-1992).

§ 1-19-327. ACTIVITIES WITHIN THE FLOODPLAIN DISTRICT.

(A) GENERAL.

(1) A PERMIT IS REQUIRED FOR ALL DEVELOPMENT WITHIN THE FEMA FLOODPLAIN, FLOODING SOILS, AND WETLANDS. IT SHALL BE GRANTED ONLY AFTER ALL NECESSARY PERMIT APPLICATIONS ARE APPROVED BY FEDERAL, STATE, AND COUNTY AGENCIES.

(2) The issuance of any permits by the State of Maryland or Corps of Engineers does not permit development within THE Floodplain District except in conformity with provisions of this chapter.

(3) THE ZONING ADMINISTRATOR MAY USE TAX ASSESSMENT RECORDS TO DETERMINE SUBSTANTIAL IMPROVEMENT WHEN AN IMPROVEMENT IS PROPOSED TO AN EXISTING STRUCTURE. SUBSTANTIAL IMPROVEMENT WILL BE CALCULATED ON A CUMULATIVE BASIS.

(4) Any substantial improvement or replacement approved shall be in conformance with the requirements of the permit program of the Maryland Department of the Environment and the U.S. Army Corps of Engineers.

(5) Within the FEMA FLOODPLAIN, SUBSTANTIAL IMPROVEMENTS, substantial improvements due to existing structures substantial damage, replacement or relocated dwelling units (including manufactured homes), the addition of accessory buildings, THE expansion or replacement of an existing nonconforming use, or development of an existing parcel of record lying totally within the FEMA FLOODPLAIN, REQUIRE APPROVAL BY THE BOARD OF APPEALS (1-19-328 (A)).

(6) Within a danger reach area, the replacement of dwelling units (including manufactured homes) damaged by flood, the substantial improvement of habitable area within existing structures, the addition of habitable area to an existing structure, or development of an existing parcel of record lying partially within a danger reach area REQUIRE APPROVAL BY THE BOARD OF APPEALS (1-19-332 (A)).

(B) LAND DEVELOPMENT.

(1) FEMA Floodplain and Wetlands. Within the FEMA FLOODPLAIN and wetlands, no NEW development, including parking lots impervious to water, or fill, or excavation operations in conjunction with development will be permitted. SUBSTANTIAL IMPROVEMENTS, substantial improvements due to existing structures substantial damage,

replacement or relocated dwelling units (including manufactured homes), the addition of accessory buildings, THE expansion or replacement of an existing nonconforming use, or development of an existing parcel of record lying totally within the **FEMA FLOODPLAIN SHALL BE PERMITTED ONLY WITH APPROVAL BY THE BOARD OF APPEALS.** Open shelters, pole-type structures (open on all sides and without walls), open fences and recreational uses, and recreational equipment which are not contained in a building, are exempt from **THE REQUIREMENTS OF THIS SECTION** upon obtaining a zoning certificate in order to ensure the type of construction will not alter the flood elevation, except as outlined in **1-19-327 (D).**

(2) Watershed Management Plans. All substantial improvements, replacements or other developments **WITHIN THE FEMA FLOODPLAIN** shall be consistent with watershed management plans where such plans exist. Structures slated for acquisition under future flood hazard management projects may not be improved or replaced.

(3) Floodplain and Stream Setbacks. A minimum setback of 25 feet shall be provided from all **FEMA** floodplain boundaries or 50 feet from the bank of any perennial or intermittent stream, whichever is greater, and shall be maintained or planted with natural vegetation.

(4) Subdivisions and Site Plans. All new subdivisions or site plans shall have **STREAM SETBACKS AS WELL AS THE 100-YEAR FLOODPLAIN AND FLOODWAY DELINEATIONS AND ELEVATIONS, AS REFLECTED ON FREDERICK COUNTY'S FLOOD INSURANCE STUDY AND DIGITAL FIRM PUBLISHED BY FEMA** clearly shown and certified by a registered professional engineer, registered professional land surveyor, or registered property line surveyor. **THE PLAN SHALL DEMONSTRATE THAT DEVELOPMENT WILL AVOID THE FEMA FLOODPLAIN.** No new lots shall be created unless they have adequate buildable area outside of designated **FEMA** floodplain areas.

(5) **APPROXIMATE FEMA FLOODPLAIN. FOR DEVELOPMENT PROPOSED IN THE APPROXIMATE FLOODPLAIN ZONE A (NO WATER SURFACE ELEVATIONS OR FLOODWAY DATA PROVIDED), THE APPLICANT MUST USE THE BEST AVAILABLE INFORMATION TO DETERMINE THE ELEVATION OF THE 100-YEAR FLOOD AND THE EXTENT OF THE FLOODWAY, AND MUST DELINEATE THESE ON THE SITE PLAN SUBMITTED FOR APPROVAL. FOR NEW SUBDIVISIONS, THE APPLICANT MUST HAVE THE 100-YEAR FLOOD ELEVATIONS CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER BASED ON HYDROLOGIC AND HYDRAULIC ANALYSES WHICH INCLUDE A FLOODWAY ANALYSIS. FOR INDIVIDUAL LOT DEVELOPMENT IF NO DATA ARE AVAILABLE, METHODS DESCRIBED IN FEMA PUBLICATION #265 MANAGING FLOODPLAIN DEVELOPMENT IN APPROXIMATE ZONE A AREAS, SHOULD BE USED TO DETERMINE THE 100-YEAR FLOOD ELEVATION AT THE SITE.**

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(6) FLOODWAY RESTRICTIONS. NO NEW DEVELOPMENT SHALL BE PERMITTED IN THE FLOODWAY EXCEPT AS PROVIDED IN 1-19-327 (D).

(7) FLOODING SOILS. NO NEW DEVELOPMENT SHALL BE PERMITTED IN AREAS OF FLOODING SOILS UNLESS APPROVED THROUGH A MITIGATION PROCESS INCLUDING THE FOLLOWING:

(A) SUBMISSION BY THE APPLICANT OF A GEOTECHNICAL REPORT AND SOILS REPORT PREPARED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MARYLAND AND A SOIL SCIENTIST WITH FULL MEMBERSHIP IN A STATE SOILS PROFESSIONAL ORGANIZATION OR THAT MEETS CERTIFICATION REQUIREMENTS. THE REPORT SHALL ADDRESS SOIL CHARACTERISTICS TO INCLUDE FLOODING FREQUENCY, DURATION, AND SURFACE WATER DEPTH.

(B) DETERMINATION OF BUILDABLE AREAS BY THE DIVISION OF PERMITTING AND DEVELOPMENT REVIEW IN CONSULTATION WITH THE SOIL CONSERVATION DISTRICT AND THE NATURAL RESOURCES CONSERVATION SERVICE.

(C) SUBMISSION BY THE APPLICANT OF A MITIGATION PLAN FOR APPROVAL BY THE DIVISION OF PERMITTING AND DEVELOPMENT REVIEW IN CONSULTATION WITH THE SOIL CONSERVATION DISTRICT AND THE NATURAL RESOURCES CONSERVATION SERVICE. THE MITIGATION PLAN SHALL INCLUDE SUCH FACTORS AS:

1. RETENTION POND RELEASING AT PREDEVELOPMENT RATES TO INCLUDE CAPACITY FOR TEMPORARY INUNDATION AS DETERMINED IN 1-19-327 (B)(7)(A).

2. USE OF TECHNIQUES TO REDUCE OFF-SITE RUNOFF AND ENSURE ADEQUATE GROUNDWATER RECHARGE.

(C) BUILDING STANDARDS. DEVELOPMENT WITHIN THE FEMA floodplain, shall meet the standards as provided in subsection 1 through 4 below. Replacement or relocated dwelling units (including manufactured homes) or substantial improvements due to existing structures substantial damage or addition of accessory buildings will not be permitted without the approval of the Board of Appeals and then only if the lowest floor is elevated 1 foot above the elevation of the 100 year flood and the dwelling or improvement is placed on a permanent foundation or securely anchored to an adequately anchored foundation system to resist flotation, collapse or lateral movement.

(1) ELEVATION. The elevation of the lowest floor (SEE DEFINITION OF LOWEST FLOOR), of all substantially improved or replaced structures shall be at least 1 foot above the elevation of the 100 year flood. Basements are prohibited.

ALL APPLICANTS SHALL AGREE IN WRITING TO PROVIDE AN ELEVATION CERTIFICATE COMPLETED BY A REGISTERED PROFESSIONAL ENGINEER OR SURVEYOR TO CERTIFY THE LOWEST FLOOR (AS BUILT) OF ANY STRUCTURE IS ELEVATED ABOVE THE 100-YEAR FLOOD. AN ELEVATION CERTIFICATE MUST BE SUBMITTED BEFORE A ZONING CERTIFICATE MAY BE APPROVED.

(2) Enclosures below lowest floor. The relocation or substantial improvements to existing structures or the addition of accessory structures containing fully enclosed areas below the lowest floor (including, but not limited to crawl spaces, solid footings and continuous foundations) shall be designed to meet or exceed the following minimum criteria:

(a) A minimum of 2 openings having a total net area of not less than 1 square inch for every square foot of enclosed area subject to flooding shall be provided.

(b) The bottom of all openings shall be no higher than 1 foot above grade.

(c) Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

(3) ANCHORING. ALL STRUCTURES SHALL BE FIRMLY ANCHORED IN ACCORDANCE WITH ACCEPTABLE ENGINEERING PRACTICES TO PREVENT FLOTATION, COLLAPSE, AND LATERAL MOVEMENT DURING FLOODING. ALL LARGE PIPES, AND STORAGE TANKS LOCATED BELOW THE FLOOD PROTECTION ELEVATION SHALL BE FIRMLY ANCHORED TO PREVENT FLOTATION.

(4) UTILITIES.

ELECTRIC- ALL ELECTRIC UTILITIES TO THE BUILDING SIDE OF THE METER, BOTH INTERIOR AND EXTERIOR TO THE BUILDING, MUST COMPLY WITH ALL REQUIREMENTS OF THIS CHAPTER. DISTRIBUTION PANEL BOXES MUST BE AT LEAST 2 FEET ABOVE THE FLOOD PROTECTION ELEVATION. ALL OUTLETS AND ELECTRICAL INSTALLATIONS, SUCH AS HEAT PUMPS, AIR CONDITIONERS, WATER HEATERS, FURNACES, GENERATORS, DISTRIBUTION SYSTEMS, INCLUDING DUCT WORK, MUST BE INSTALLED AT OR ABOVE THE FLOOD PROTECTION ELEVATION. REPLACEMENT HVAC EQUIPMENT SHALL BE ELEVATED TO THE FLOOD PROTECTION ELEVATION UNLESS PROVEN TO BE IMPRACTICAL.

PLUMBING- TOILETS, SINKS, SHOWERS, WATER HEATERS, PRESSURE TANKS, FURNACES, AND OTHER PERMANENT PLUMBING INSTALLATIONS MUST BE INSTALLED AT OR ABOVE THE FLOOD PROTECTION ELEVATION.

GAS- GAS METERS AND GAS APPLIANCES MUST BE INSTALLED AT OR ABOVE THE FLOOD PROTECTION ELEVATION.

FUEL TANKS- ALL GAS (PROPANE) TANKS INSTALLED IN THE FLOODPLAIN ARE REQUIRED TO BE ANCHORED TO PREVENT FLOTATION IN ACCORDANCE WITH THE NATIONAL FIRE PROTECTION ASSOCIATION CODE 58. ALL TANKS INSTALLED IN FLOODPLAIN AREAS SHALL BE EITHER ELEVATED OR ADEQUATELY ANCHORED TO PREVENT FLOTATION UP TO THE FLOOD PROTECTION ELEVATION. ALL FUEL OIL STORAGE TANKS INSTALLED IN THE FLOODPLAIN MUST BE EITHER ELEVATED OR SECURELY ANCHORED TO PREVENT FLOTATION UP TO THE FLOOD PROTECTION ELEVATION. VENT PIPES MUST EXTEND TO OR ABOVE THE FLOOD PROTECTION ELEVATION AND FILL CAPS BELOW THE FLOOD PROTECTION ELEVATION MUST BE SCREW TYPE WITH A TIGHT FITTING GASKET TO PREVENT MIXING OF WATER WITH OIL.

WATER SUPPLY AND SANITARY FACILITIES- WATER SUPPLY DISTRIBUTION AND SANITARY DISPOSAL COLLECTION SYSTEMS MUST BE DESIGNED TO MINIMIZE OR ELIMINATE THE INFILTRATION OF FLOOD WATERS INTO THE SYSTEMS OR DISCHARGES FROM THE SYSTEMS INTO FLOOD WATERS AND SHALL BE LOCATED AND CONSTRUCTED SO AS TO MINIMIZE OR ELIMINATE FLOOD DAMAGE. ON-SITE SEWAGE DISPOSAL SYSTEMS SHALL MEET THESE SAME STANDARDS.

(D) EXEMPTIONS. THIS SECTION DOES NOT prohibit the placement or repair of road crossings; water impoundments for stormwater management; retention areas; agricultural activities NOT REQUIRING ZONING CERTIFICATE APPROVAL; public utility lines; environmental mitigation projects; or other minor wetland fill activities (less than 5,000 square feet of wetland impact) within designated FEMA floodplain, flooding soils, or wetlands. These floodplain activities must obtain all federal, state and local permits required and for minor wetland fills receipt of a letter of no significant impact from the responsible federal or state agency. (Ord. 92-04-039, 2-18-1992; Ord. 92-13-048, 7-7-1992; Ord. 93-13-077, 6-1-1993)

§ 1-19-328. **PROCEDURES FOR ACTIVITIES** WITHIN THE **FEMA** FLOODPLAIN.

(A) THE BOARD OF APPEALS SHALL REVIEW THE FOLLOWING ACTIVITIES WITHIN THE FEMA FLOODPLAIN: SUBSTANTIAL IMPROVEMENTS, SUBSTANTIAL IMPROVEMENTS DUE TO EXISTING STRUCTURES SUBSTANTIAL DAMAGE, REPLACEMENT OR RELOCATED DWELLING UNITS (INCLUDING MANUFACTURED HOMES), THE ADDITION OF ACCESSORY BUILDINGS, THE expansion or replacement of an existing nonconforming use, or development of an existing parcel of record lying totally within the FEMA FLOODPLAIN. APPLICATIONS TO ALLOW NEW STRUCTURES OR FILL TO BE PLACED IN THE FLOODWAY SHALL NOT BE CONSIDERED. The Board of Appeals may GRANT AN APPLICATION FOR APPROVAL FOR ACTIVITY WITHIN THE FEMA FLOODPLAIN WHEN THE BOARD SPECIFICALLY FINDS THAT:

(1) Failure to grant the APPLICATION FOR APPROVAL would result in exceptional hardship to the applicant; and

(2) The granting of AN APPLICATION FOR APPROVAL would not increase flood heights, add threats to public safety, RESULT IN extraordinary public expense, create nuisances, cause fraud or victimization of the public or conflict with existing local laws or ordinances; and

(3) The granting of AN APPLICATION FOR APPROVAL WOULD NOT ALLOW NEW STRUCTURES OR FILL TO BE PLACED IN THE FLOODWAY; AND

(4) The granting of AN APPLICATION FOR APPROVAL is the minimum necessary considering the flood hazard to provide relief and that public funds may not be available to mitigate the results of THE APPROVAL; and

(5) All new structures and substantial improvements to existing structures will have the lowest floor elevated to the greatest extent possible with respect to the 100 year flood elevation, BUT AT LEAST TO THE FLOOD PROTECTION ELEVATION, and a FEMA elevation certificate filed. In addition, all structures, including manufactured homes, must be firmly anchored in accordance with acceptable engineering practices (i.e., FEMA publication 85 "Manufactured Home Installation in Flood Hazard Areas"); and

(6) The granting of a permit by the MARYLAND DEPARTMENT OF THE ENVIRONMENT if located within a FEMA floodplain; and

(7) The action is duly recorded with the deed of the property on which the APPLICATION FOR APPROVAL is granted prior to the issuance of a building permit. Any expense incurred by the recording is the responsibility of the applicant.

(8) The Board of appeals shall not grant APPROVAL OF THE ABOVE ACTIVITIES for lots containing floodplain created after June 6, 1989.

(B) The Board of Appeals will notify the applicant OF APPROVAL in writing THROUGH the Zoning Administrator. THE DECISION OF APPROVAL AND FINDINGS SHALL INCLUDE THE NOTIFICATION THAT:

(1) The issuance of a decision to allow construction of a structure below the 100 year flood level will result in increased premium rates for flood insurance;

(2) Such construction below the 100 year flood level increases risks to life and property.

(C) The Board of Appeals will maintain a record of all decisions, including justification for their issuance, and **THE ZONING ADMINISTRATOR WILL** report such decisions in the county biennial reports submitted to the Federal Emergency Management Agency.(Ord. 92-04-039, 2-18-1992)

§ 1-19-329. WATERCOURSE RELOCATION OR ALTERATION.

In the event that a proposed development requires the relocation or alteration of a watercourse, evidence shall be presented as part of the permit application that all adjacent communities and the **MARYLAND STATE NFIP COORDINATING OFFICE, MARYLAND DEPARTMENT OF THE ENVIRONMENT** have been notified by certified mail and have approved of the proposed alteration or relocation. Copies of these notifications shall then be forwarded to the Federal Emergency Management Agency, Federal Insurance Administration. In addition, the developer shall assure the Zoning Administrator, in writing, that the flood-carrying capacity within the altered or relocated portion of the watercourse in question will be maintained.
(Ord. 92-04-039, 2-18-1992)

§ 1-19-330. DANGER REACH AREAS.

A danger reach area shall be defined as the Lake Merle Danger Reach Area as specified in the Greenhorn & O'Mara study dated 1995 and approved by the Maryland Department of the Environment on May 8, 1995.
(Ord. 96-02-154, 2-6-1996)

§ 1-19-331. ACTIVITIES WITHIN DANGER REACH AREAS.

(A) Except as provided for herein, within the danger reach area, no land development or fill or excavation operations in conjunction with land development including parking lots impervious to water will be permitted which will increase the flood elevation or expand the danger reach area.

(B) No new lots shall be created which are encumbered by the danger reach area, unless sufficient building area is available outside the danger reach area.

(C) For all new construction a minimum horizontal setback of 10 feet or a vertical setback of plus 5 feet shall be provided from all danger reach area boundaries and shall be maintained or planted with natural vegetation, unless a variance is obtained from the Board of Appeals.

(D) All new subdivisions or site plans shall have danger reach area boundaries delineated and certified by a registered professional engineer, registered professional land surveyor or registered property line surveyor, where applicable.

(E) The above requirements do not prohibit the placement or repair of road or driveway crossings, water impoundments for stormwater management, retention areas, agricultural activities, public utility lines, environmental mitigation projects, or other minor wetland fill activities (less than 5,000 square feet of wetland impact) within designated danger reach areas. The owner must obtain all federal, state and local permits required for these activities.
(Ord. 96-02-154, 2-6-1996)

§ 1-19-332. PROCEDURES FOR ACTIVITIES WITHIN DANGER REACH AREAS.

(A) **WITHIN THE DANGER REACH AREA** the Board of Appeals may **GRANT AN APPLICATION FOR APPROVAL FOR** the replacement of dwelling units (including manufactured homes) damaged by flood, the substantial improvement of habitable area within existing structures, the addition of habitable area to an existing structure, or development of an existing parcel of record lying partially within a danger reach area. **THE BOARD OF APPEALS MAY GRANT AN APPLICATION FOR APPROVAL FOR ACTIVITY WITHIN A DANGER REACH AREA WHEN THE BOARD SPECIFICALLY FINDS THAT:**

(1) Failure to grant the variance would result in exceptional hardship to the applicant; **AND**

(2) The granting of **AN APPLICATION FOR APPROVAL** would not increase flood heights, expand the danger reach area, or threaten public safety; **AND**

(3) The granting of **AN APPLICATION FOR APPROVAL** is necessary considering the flood hazard to provide relief; **AND**

(4) All new structures and substantial improvements to existing structures will have the lowest floor elevated to the greatest extent possible with respect to the danger reach elevation and an elevation certificate is filed with Zoning Administrator; and

(5) A waterway construction permit, or other approval, by the Maryland Department of the Environment if improvements are to be located within an area subject to state regulatory authority; **AND**

(6) If any portion of the improvement is within the danger reach area, the action **SHALL BE** recorded with the deed to the property on which the **AN APPLICATION FOR APPROVAL** is granted prior to the issuance of a building permit. Any expense incurred by the recording is the responsibility of the applicant.

(B) The Board of Appeals may approve within the danger reach area the substantial improvement of habitable area within existing structures or the addition of

habitable area to an existing structure or permit development of an existing parcel of record lying partially within a danger reach area if:

(1) The (lowest) habitable floor is elevated at least 1 foot above the elevation of the danger reach area and the dwelling or improvement is placed on a permanent foundation system to resist flotation, collapse or lateral movement; and

(2) The relocation or substantial improvements to existing structures or the addition of accessory structures containing fully enclosed areas below the lowest floor (including, but not limited to crawl spaces, solid footings and continuous foundations) shall be designed to meet or exceed the following minimum criteria:

(a) A minimum of 2 openings having a total net area of not less than 1 square inch for every square foot of enclosed area subject to flooding shall be provided.

(b) The bottom of all openings shall be no higher than 1 foot above grade.

(c) Openings may be equipped with screens, louvers, valves, or other coverings or devices, provided that they permit the automatic entry and exit of floodwaters.

(C) The Board of Appeals will notify the applicant **OF APPROVAL** in writing **THROUGH** the Zoning Administrator. **THE DECISION OF APPROVAL AND FINDINGS SHALL INCLUDE THE NOTIFICATION THAT:**

(1) The issuance of a decision to allow construction of a structure within the danger reach area may result in increased premium rates for insurance;

(2) Such construction in the danger reach area may increase risks to life and property.

(D) The Board of Appeals shall not grant **APPROVAL** to build within the danger reach area for lots created after the enactment of these provisions.
(Ord. 96-02-154, 2-6-1996)

(E) With respect to existing lots affected by the danger reach area, the Zoning Administrator may, by the issuance of a zoning certificate, approve the following:

(1) The location on a lot of open shelters, pole-type structures (open on all sides and without walls), open fences and recreational uses, and recreational equipment which are not contained in a building, provided that the type of construction will not increase the flood elevation or expand the danger reach area;

(2) The replacement of a habitable structure or portion thereof damaged or destroyed other than by flooding;

(3) The expansion of a structure to add nonhabitable improvements, including, but not limited to, porches, decks, patios, etc., when such improvements will be located within the danger reach area, provided that the construction will not increase the flood elevation or expand the danger reach area;

(4) The expansion of a structure to create additional habitable areas, provided that the additional habitable area does not fall within the danger reach area.

~~§ 1-19-327A~~ **§ 1-19-333**. ADDITIONAL REQUIREMENTS IN THE LINGANORE WATERSHED PROTECTION AREA.

(A) The following waterbody buffer requirements shall apply to lots and parcels of record created by subdivision or resubdivision of land in the Linganore Watershed Protection Area after July 20, 2007. The requirements in this section shall not apply to existing structures. To meet the requirements of this section, applicants shall use Best Available Data.

(B) Waterbody buffer widths shall be determined in accordance with the requirements described below. As used herein, the term "***moderate slope***" means a slope with a gradient of 15% to less than 25%; and the term "***steep slope***" means a slope with a gradient of 25% or greater.

(1) The waterbody buffer width shall be derived by calculating the gradient of the slope within a 175-foot cross-section on both sides of a waterbody, drawn perpendicular to the direction of waterbody flow. Cross-sectional measurements shall be taken every 50 feet along the bank (s) of the waterbody.

(2) The minimum waterbody buffer shall be 100 feet.

(3) Except as provided in subsection (4) below, if 60% or more of the 175-foot cross-section includes moderate (15% to <25%) slopes, then the waterbody buffer shall be increased to 150 feet.

(4) If the toe and the crest of a moderate (15% to <25%) slope and the adjoining backslope are located within the 175-foot cross-section, the waterbody buffer will extend to the crest of the moderate (15% to <25%) slope, or one hundred feet, whichever is greater.

(5) Except as provided in subsections (6) or (7) below, if 60% or more of the 175-foot cross-section includes steep (25% or greater) slopes, then the waterbody buffer shall be increased to 175 feet.

(6) If the 175-foot cross-section includes a steep (25% or greater) slope and the steep slope extends beyond 175 feet, the waterbody buffer shall be extended to include the entire steep slope area.

(7) If the toe and the crest of a steep (25% or greater) slope and the adjoining backslope are located within the 175-foot cross section, the waterbody buffer will extend to the crest of the steep slope, or one hundred feet, whichever is greater.

(8) Waterbody buffer widths may be greater than those provided herein if floodplain and wetlands extend beyond the waterbody buffer area.

(C) No buildings, structures, or impervious surfaces, and no activities requiring clearing or grading over 5,000 square feet will be permitted in waterbody buffers, except for utilities, public and private roads, driveways, bikeways, and trails which meet the requirements of subsection (D) below or qualify for the exemption in subsection (E) below.

(D) (1) Public and private roads, driveways, utilities, bikeways or trails may be permitted in the Waterbody buffer only if the applicant has clearly demonstrated that no feasible alternative exists, and that every reasonable effort has been made to locate the public and private roads, driveways, utilities, bikeways or trails outside of the buffer area.

(2) In order to locate public and private roads, driveways, utilities, bikeways or trails in the waterbody buffer, the applicant must submit a justification statement to the appropriate county agency or division, including: (a) an evaluation of at least one alternative location for the requested public and private roads, driveways, utilities, bikeways or trails; and (b) the reasons why the alternative location or locations are not feasible.

(3) Public and private roads, driveways, utilities, bikeways and trails that are allowed in the buffer area must be located to create the least disturbance to existing vegetation, grade, and wetlands.

(4) Where feasible, utility easements should be set back a minimum of 50 feet from all waterbodies or outside wetlands and their buffers, whichever is greater.

(5) Utility, bikeway or trail easements or rights-of-way within the waterbody buffer should be co-located whenever possible.

(E) Upgrades, maintenance or repair of existing public and private roads, driveways, utilities, bikeways and trails shall be exempt from the requirements of subsection (D) above.

(F) Sediment and erosion control structures or facilities may be allowed as a temporary use in the waterbody buffers if Soil Conservation District (SCD) staff or Natural Resources Conservation Service (NRCS) staff certifies in writing that performance of the overall site sediment control system will be measurably improved by placement of a facility at that location. At a minimum, grading must be at least 25 feet from the bank of the waterbody and from any wetlands.

(G) Stormwater Management (SWM) facilities or structures and appurtenant conveyances (collectively hereinafter referred to as a "SWM Control System") within the waterbody buffer area may be approved by the appropriate county agency or division. In order to obtain this approval, the applicant must submit a written request, including a justification statement discussing each of the following factors:

(1) Documented and measurable improvement in the effectiveness of the SWM Control System if placed in the buffer.

(2) Minimization of encroachment into the buffer.

(3) Avoidance of existing sensitive areas (wetlands and their buffers, floodplains and their buffers, steep (25% or greater) slopes, and habitat for rare, threatened, and endangered species).

(4) Whether excessive grading will result from an uphill SWM location; and whether the proposed SWM Control System(s) will allow for the reduction of numerous smaller and less efficient SWM Control Systems outside the buffer.

(5) Whether severely degraded conditions within the buffer area exist that could be improved if the SWM facility or structure is located within the buffer area.

(6) The presence of man-made structures (e.g., farm ponds) in the buffer area under pre-development conditions that can be converted to SWM use without excessive waterbody disturbance.

(H) Deposition or stockpiling of any material, including excavated rock, topsoil, stumps, shrubs, or any building or construction material, within the designated waterbody buffer is prohibited. However, stockpiling which is necessary to restore an area within a utility easement or temporary sediment control area may be approved by the appropriate county agency or division on a temporary basis.

§§ 1-19-3343 – 1-19-345. RESERVED.

ARTICLE VI. SPECIAL DEVELOPMENT PROVISIONS

DIVISION 2. CLUSTER DEVELOPMENT

§ 1-19-359. DENSITY DETERMINATION AND DESIGN REQUIREMENTS

The average dwelling unit density will be no greater than the permitted density for the district in which the units are located. For the purposes of this division, DENSITY means the maximum number of dwelling units which could be built on net developable land area in the zoning district. Net developable land is that land remaining after ~~annual floodplain~~ **FLOODING SOILS** areas and rights-of-way for principal highways have been deducted from the gross site area.

DIVISION 6. COHOUSING DEVELOPMENT

§ 1-19-436. DENSITY DETERMINATION AND DESIGN REQUIREMENTS

(B) For the purpose of this division, DENSITY means the maximum number of dwelling units which could be built on net developable land area in the zoning district. Net developable land is that land remaining after ~~annual floodplain~~ **FLOODING SOILS** areas and rights-of-way for principal highways have been deducted from the gross site area.